

VOICE INTELLIGIBILITY ENHANCEMENT SYSTEM

Abstract of the Disclosure

Intelligibility of a human voice projected by a loudspeaker in an environment of
5 high ambient noise is enhanced by processing a voice signal in accordance with the
frequency response characteristics of the human hearing system. Intelligibility of the
human voice is derived largely from the pattern of frequency distribution of voice sounds,
such as formants, as perceived by the human hearing system. Intelligibility of speech in a
voice signal is enhanced by filtering and expanding the voice signal with a transfer
10 function that approximates an inverse of equal loudness contours for tones in a frontal
sound field for humans of average hearing acuity.

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